

**PATENT**

Practitioner's Docket No. 013436.0283CIUS (Bolland 11-28)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re application of: Richard R. Boland et al. Confirmation No.: 2921  
 Application No.: 10/719,859 Filed: November 20, 2003  
 Patent No.: US 7,069,002 B2 Issued: June 27, 2006  
 Title: MESSAGE WAITING INDICATION OPERABLE TO OVERCOME A BORDER  
 CONDITION BETWEEN MOBILE SWITCHING CENTERS

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 Alexandria, VA 22313-1450

**REQUEST FOR REFUND  
 (IMPROPER CHARGE OF DEPOSIT ACCOUNT)**

**I. REFUND REQUEST**

This is a request for a refund, with respect to charges to Deposit Account 50-1848, shown on the statement for December 2005 for the above-identified application. A copy of the Deposit Account Statement, in which the error referred to occurs, accompanies this request and is marked Exhibit A.

**II. FEES CHARGED FOR WHICH REFUND REQUESTED**

<u>FEES EXPLANATION</u>	<u>AMOUNT OF REFUND REQUESTED</u>
Independent Claims in Excess of 3	\$200.00

**III. EXPLANATION OF WHY CONTESTED CHARGE IS IN ERROR**

An Amendment In Response To Non-Final Office Action was filed in the above-identified application on November 29, 2005 via facsimile with the US Patent Office, a copy of which is attached as Exhibit B. The Amendments To The Claims beginning on page 3 of the response included eight (8) new claims, three (3) of which were independent claims. Since the original application filed November 20, 2003 contained only one (1) independent claim (which was paid for at the time of filing the application), the application as amended contained a total of only four (4) independent claims, not five (5) as alleged by the charge to the Deposit Account. Therefore, it is requested that a refund of \$200.00 be made to the Deposit Account for the additional independent claim mistakenly charged.

**IV. MANNER OF REFUND**

Please make refund by crediting Deposit Account No. 50-1848.

Date: 02 - August - 2006  
 Reg. No.: 28,300  
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 Fax No.: 303-894-9239

*James M. Graziano*  
 James M. Graziano  
 Customer No. 24283

(Request for Refund (Improper Charge of Deposit Account)-page 1 of 1)

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**United States  
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**Deposit Account Statement**

Requested Statement Month:

December 2005

Deposit Account Number:

501848

Name:

PATTON BOGGS LLP

Attention:

SUSAN STATZ

Address:

1660 LINCOLN ST

City:

DENVER

State:

CO

Zip:

80264

Country:

UNITED STATES

DATE	SEQ	POSTING REF	ATTORNEY DOCKET NBR	FEE CODE	AMT	BAL
12/05	4	10719859	BOLLAND 11-28 (13436.285)	1201	\$400.00	\$9,484.90
12/22	381	PCT/US05/45593	023078.0101	1601	\$300.00	\$9,184.90
12/22	382	PCT/US05/45593	023078.0101	1602	\$1,000.00	\$8,184.90
12/22	383	PCT/US05/45593	023078.0101	1701	\$1,023.00	\$7,161.90
12/22	384	PCT/US05/45593	023078.0101	8007	\$20.00	\$7,141.90
START BALANCE		SUM OF CHARGES		SUM OF REPLENISH	END BALANCE	
\$9,884.90		\$2,743.00		\$0.00	\$7,141.90	

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EXHIBIT A

PAGE 4/15 \* RCVD AT 8/2/2006 2:40:31 PM [Eastern Daylight Time] \* SVR:USPTO-EFXRF-3/19 \* DNI:2736500 \* CSID:1... \* DURATION (mm:ss):04:14 \* 8/2/2006

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Bolland 11-28  
(Formerly 13436.285)  
(PATENT)

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:  
Richard R. Boland et al.

Application No.: 10/719859

Confirmation No.: 2921

Filed: November 20, 2003

Art Unit: 2683

For: MESSAGE WAITING INDICATION  
OPERABLE TO OVERCOME A BORDER  
CONDITION BETWEEN MOBILE  
SWITCHING CENTERS

Examiner: D. C. Le

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION

MS Amendment  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

INTRODUCTORY COMMENTS

In response to the Office Action dated October 20, 2005, please amend the above-identified U.S. patent application as follows:

Amendments to the Specification begin on page 2 of this paper.

Amendments to the Claims are reflected in the listing of claims which begins on page 3 of this paper.

Remarks/Arguments begin on page 10 of this paper.

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AMENDMENTS TO THE SPECIFICATION

Please delete the paragraph on page 5, lines 1 ~ 4, and replace it with the following:

Figures 2 - 5 [[3]] illustrate in flow diagram form[[,]] the operation of the present message waiting indication update feature in processing message waiting indication for transmission to the mobile subscriber's wireless communication device;

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### AMENDMENTS TO THE CLAIMS

1. (Currently amended) A message waiting indication update feature, operable in a cellular communication network, for maintaining a count of the unread messages stored for a subscriber who uses a mobile subscriber wireless communication device, comprising:

Home Location Register means, associated with said subscriber's home Mobile Switching Center, for maintaining a profile for said subscriber comprising a set of data that identifies said subscriber, service authorizations for said subscriber, said data indicative of a present count of unread messages for said subscriber, and data indicative of a present count of acknowledged unread messages for said subscriber;

subscriber profile means for storing data in said Home Location Register means indicative of a present count of unread messages for said subscriber;

subscriber acknowledgement means for storing data in said Home Location Register means indicative of a present count of acknowledged unread messages for said subscriber;

border condition determining means for identifying that a cell last accessed by said mobile subscriber wireless device is on a border with a Mobile Switching Center other than the serving Mobile Switching Center;

Mobile Switching Center message indication means, responsive to the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, for transmitting data indicative of a present count of unread messages for said subscriber to said other Mobile Switching Center; and

message indication means, responsive to the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, for transmitting data to said subscriber indicative of a present count of unread messages for said subscriber.

Claims 2 and 3 (Canceled)

4. (Currently amended) The message waiting indication update feature of claim [13] 1 further comprising:

registration means, operable in a serving Mobile Switching Center and responsive to said subscriber initiating a registration process from a mobile subscriber wireless communication device at said serving Mobile Switching Center, for transmitting a registration request message to said

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Home Location Register means, associated with said subscriber's home Mobile Switching Center, and

registration indication result means for transmitting said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber to said serving Mobile Switching Center.

5. (Original) The message waiting indication update feature of claim 4 further comprising:

register update means for storing said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber in a visited location register associated with said serving Mobile Switching Center.

6. (Original) The message waiting indication update feature of claim 4 wherein said message indication means comprises:

registration means, operable in a serving Mobile Switching Center and responsive to said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber indicating the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, for transmitting data to said mobile subscriber wireless communication device indicative of a present count of unread messages for said subscriber.

7. (Currently amended) The system message waiting indication update feature of claim 6 further comprising:

registration update means, responsive to said mobile subscriber wireless communication device acknowledging receipt of said data indicative of a present count of unread messages for said subscriber, for transmitting a message to said Home Location Register means, associated with said subscriber's home Mobile Switching Center acknowledging receipt by said mobile subscriber wireless communication device of said data indicative of a present count of unread messages for said subscriber; and

register update means operable in said subscriber's home Mobile Switching Center for updating said data indicative of a present count of acknowledged unread messages for said subscriber in said Home Location Register means.

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Claim 8 (Cancelled)

★ 9. (Currently amended) The system of claim 8 further A message waiting indication update feature, operable in a cellular communication network, for maintaining a count of the unread messages stored for a subscriber who uses a mobile subscriber wireless communication device, comprising:

storing data in a Home Location Register indicative of a present count of unread messages for said subscriber;

border condition determining means for identifying that a cell last accessed by said mobile subscriber wireless device is on a border with a Mobile Switching Center other than the serving Mobile Switching Center;

Mobile Switching Center message indication means, responsive to the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, for transmitting data indicative of a present count of unread messages for said subscriber to said other Mobile Switching Center; and

register update means, responsive to a change in said data indicative of a present count of unread messages for said subscriber, for storing said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber in a visited location register associated with said serving Mobile Switching Center.

10. (Currently amended) The system message waiting indication update feature of claim 9 wherein said message indication means comprises:

registration means, operable in a serving Mobile Switching Center and responsive to said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber indicating the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, for transmitting data to said mobile subscriber wireless communication device indicative of a present count of unread messages for said subscriber.

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[[12]] 11. (Currently amended) The system of claim [[11]] 10 further comprising:  
registration update means, responsive to said mobile subscriber wireless communication device acknowledging receipt of said data indicative of a present count of unread messages for said subscriber, for transmitting a message to said Home Location Register means, associated with said subscriber's home Mobile Switching Center acknowledging receipt by said mobile subscriber wireless communication device of said data indicative of a present count of unread messages for said subscriber; and

register update means operable in said subscriber's home Mobile Switching Center for said data indicative of a present count of acknowledged unread messages for said subscriber in said Home Location Register means.

★ 12. (New) A message waiting indication update feature, operable in a cellular communication network, for maintaining a count of the unread messages stored for a subscriber who uses a mobile subscriber wireless communication device, comprising:

maintaining, in the Home Location Register associated with said subscriber's home Mobile Switching Center, a profile for said subscriber comprising a set of data that identifies said subscriber, service authorizations for said subscriber, said data indicative of a present count of unread messages for said subscriber, and data indicative of a present count of acknowledged unread messages for said subscriber;

storing data in said Home Location Register indicative of a present count of unread messages for said subscriber;

storing data in said Home Location Register indicative of a present count of acknowledged unread messages for said subscriber;

identifying that a cell last accessed by said mobile subscriber wireless device is on a border with a Mobile Switching Center other than the serving Mobile Switching Center;

transmitting, in response to the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, data indicative of a present count of unread messages for said subscriber to said other Mobile Switching Center; and

transmitting, in response to the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, data to said subscriber indicative of a present count of unread messages for said subscriber.

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13. (New) The message waiting indication update feature of claim 12 further comprising:

transmitting, from a serving Mobile Switching Center and in response to said subscriber initiating a registration process from a mobile subscriber wireless communication device at said serving Mobile Switching Center, a registration request message to said Home Location Register means, associated with said subscriber's home Mobile Switching Center; and

transmitting said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber to said serving Mobile Switching Center.

14. (New) The message waiting indication update feature of claim 13 further comprising:

storing said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber in a visited location register associated with said serving Mobile Switching Center.

15. (New) The message waiting indication update feature of claim 13 wherein said step of transmitting message indication data comprises:

transmitting, from a serving Mobile Switching Center and in response to said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber indicating the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, data to said mobile subscriber wireless communication device indicative of a present count of unread messages for said subscriber.

16. (New) The message waiting indication update feature of claim 15 further comprising:

transmitting, in response to said mobile subscriber wireless communication device acknowledging receipt of said data indicative of a present count of unread messages for said subscriber, a message to said Home Location Register, associated with said subscriber's home Mobile Switching Center acknowledging receipt by said mobile subscriber wireless communication device of said data indicative of a present count of unread messages for said subscriber; and

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updating said data indicative of a present count of acknowledged unread messages for said subscriber in said Home Location Register.

\* 17. (New) A message waiting indication update feature, operable in a cellular communication network, for maintaining a count of the unread messages stored for a subscriber who uses a mobile subscriber wireless communication device, comprising:

storing data in a Home Location Register indicative of a present count of unread messages for said subscriber;

identifying that a cell last accessed by said mobile subscriber wireless device is on a border with a Mobile Switching Center other than the serving Mobile Switching Center;

transmitting, in response to the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, data indicative of a present count of unread messages for said subscriber to said other Mobile Switching Center; and

storing, in response to a change in said data indicative of a present count of unread messages for said subscriber, said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber in a visited location register associated with said serving Mobile Switching Center.

18. (New) The message waiting indication update feature of claim 17 wherein said step of transmitting message indication data comprises:

transmitting, from a serving Mobile Switching Center and in response to said data indicative of a present count of unread messages for said subscriber, and said data indicative of a present count of acknowledged unread messages for said subscriber indicating the presence of unread messages in excess of those identified in said present count of acknowledged unread messages for said subscriber, data to said mobile subscriber wireless communication device indicative of a present count of unread messages for said subscriber.

19. (New) The message waiting indication update feature of claim 18 further comprising:

transmitting, in response to said mobile subscriber wireless communication device acknowledging receipt of said data indicative of a present count of unread messages for said subscriber, a message to said Home Location Register, associated with said subscriber's home

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Mobile Switching Center acknowledging receipt by said mobile subscriber wireless communication device of said data indicative of a present count of unread messages for said subscriber; and  
updating said data indicative of a present count of acknowledged unread messages for said subscriber in said Home Location Register.

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REMARKS

Claims 1 - 12 are pending in this application. However, there are only 11 claims in actuality. Claim 12 (now claim 11) has been amended to correct a claim numbering error.

In an Office Action dated 20 October 2005, the Examiner objected to the disclosure at page 5, lines 1 - 4. The specification has been amended to overcome the Examiner's objection.

In an Office Action dated 20 October 2005, the Examiner rejected claims 1 - 3 and 8 under 35 USC 102(b) as being anticipated by Houde (US Patent No. 5,797,094) and objected to claims 4 - 7 and 9 - 12 as being dependent upon a rejected base claim. Applicants have cancelled claims 2, 3, and 8 and have added new claims 12 - 19.

The Houde patent discloses a cellular communications system including a mobile station that shifts periodically between a stand-by operating mode where communications are possible and a deep sleep operating mode wherein communications are impossible and battery power is conserved. Thus, while the mobile station is in deep sleep mode, message transmissions to the mobile station are impossible. The messages are, however, stored for later delivery, and a record of the stored, undelivered messages is maintained for future access. When the mobile station emerges from deep sleep, the maintained message record is checked, and the stored messages for the awakened mobile station are retrieved and delivered.

The present system forwards the message waiting indication data to Mobile Switching Centers whose service areas overlap with the service area of the Mobile Switching Center presently serving this mobile subscriber's wireless communication device. In this manner, any one of these Mobile Switching Centers can update the mobile subscriber with regard to message waiting indications. This is accomplished by the use of the ISPAGE message which is used to forward the message waiting indication data to Mobile Switching Centers whose service areas overlap with the service area of the Mobile Switching Center presently serving this mobile subscriber's wireless communication device.

The Examiner indicated allowable subject matter and Applicants have cancelled claims 2, 3, and 8 and has amended claims 1 and 9 to incorporate the limitations indicated as allowable subject matter into claims 1 and 9. Therefore, Applicants believe that independent claims 1 and 9 and

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Aug-02-2006 12:44pm From-PATTON BOGGS

T-181 P.015/015 F-317

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dependent claims 4 – 7, 10, and 11 are now allowable. In addition, method claims 12 – 19 corresponding to allowable apparatus claims 1, 4 – 7, and 9 – 11 have been added and are believed allowable for the reasons noted above.

In view of the above amendments and remarks, Applicants believe the pending application is in condition for allowance. Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-1848, under Order No. 013436.0283C1US from which the undersigned is authorized to draw.

Respectfully submitted,  
**PATTON BOGGS LLP**

Dated: 11/29/05

By: James M. Graziano  
James M. Graziano  
Registration No.: 28,300  
(303) 830-1776  
(303) 894-9239 (Fax)  
Attorney for Applicants

Customer No. 24283

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Denver CO 80264  
(303) 830-1778

Faxsimile: (303) 894-9239

## FAX TRANSMISSION

**DATE:** August 2, 2006

**PTO IDENTIFIER:** Application Number 10/719858-Conf. #2921

Patent Number 7069002

Inventor: Richard R. Boland et al.

**MESSAGE TO:** US Patent and Trademark Office

**FAX NUMBER:** (571) 273-6500

**FROM:** PATTON BOGGS LLP

James M. Graziano

**PHONE:** (303) 830-1776

**Attorney Dkt. #:** 013436.0283C1US (Bolland 11-28)

**PAGES (Including Cover Sheet):** 15

**CONTENTS:**

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Exhibit B - Copy of Amendment In Response To Non-Final Office Action filed 11/29/2005  
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(Bolland 11-28)

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